

IN THE CLAIMS

Claims 1-22 (Canceled)

23. (Original) A method for preparing an anti-microbial powder coating composition comprising impact fusing one or more anti-microbial agents to particles of a resin-based powder.

24. (Original) The method of claim 23 further including absent the anti-microbial agent, blending the components of the powder coating composition using a premixer, feeding the mixture into an extruder, heating the mixture to a temperature high enough to melt it, cooling the melt, and processing the solid extrudate into a coating powder.

25. (Original) The method of claim 24 wherein impact fusing includes impact fusing the anti-microbial agent to the coating powder so that the anti-microbial agent is substantially entirely fused to the surface of the coating powder particles.

26. (Original) The method of claim 24 wherein impact fusing the anti-microbial agent includes mixing the anti-microbial agent with the coating powder, blending the mixture in a high intensity mixer, cooling the mixture and processing the mixture into an anti-microbial coating powder.

27. (Original) The method of claim 26 further including adjusting the blending time to approximately achieve the glass transition temperature.

28. (Original) A method for preparing an anti-microbial powder coating composition comprising blending the components of the powder coating composition using a premixer, feeding the mixture into an extruder, heating the mixture to a temperature high enough to melt it, cooling the melt, processing the solid extrudate into a coating powder, and impact fusing one or more anti-microbial agents to the particles of the coating powder.

29. (Original) The method of claim 28 wherein impact fusing one or more anti-microbial agents to the particles of the coating powder includes mixing the anti-microbial agent with the coating powder, blending the mixture in a high intensity mixer, cooling the mixture and processing the mixture into an anti-microbial coating powder.

30. (Original) The method of claim 29 further including adjusting the blending time to approximately achieve the glass transition temperature.

31. (Original) An anti-microbial powder coating composition comprising an anti-microbial silver zirconium phosphate that is homogeneously dispersed within particles of a resin-based powder.

32. (Original) The composition of claim 31 wherein the powder coating composition comprises a thermosetting composition based on a cured polyester resin composition.

33. (Original) The composition of claim 32 wherein the polyester resin composition is cured with a urethane curing agent.

34. (Original) The composition of claim 33 wherein the silver zirconium phosphate is about 1 percent to 2 percent of the sum of the components comprising the powder coating composition.

35. (Original) An anti-microbial powder coating composition comprising one or more anti-microbial metals or metal ions homogeneously dispersed within particles of a radiation curable resin-based powder.

36. (Original) The composition of claim 35 wherein the anti-microbial metal or metal ion is silver.

37. (Original) The composition of claim 36 wherein the silver is a silver ion carried by a zeolite.
38. (Original) The composition of claim 36 wherein the resin-based powder is ultraviolet-radiation curable.
39. (Original) The composition of claim 38 wherein the resin is a polyester resin.
40. (Original) The composition of claim 35 further comprising a cure initiator.
41. (Original) The composition of claim 40 wherein the cure initiator is a free radical producing cure initiator.
42. (Original) The composition of claim 40 wherein the cure initiator is a cation producing cure initiator.
43. (Original) The composition of claim 36 wherein the silver zeolite is about 1 to 2 percent by weight of the sum of the components comprising the powder coating composition.
44. (Original) A powder coating composition comprising one or more anti-microbial metals or metal ions homogeneously dispersed within particles of a resin-based powder, said resin-based powder formulated such that the components do not inhibit the migration or decrease the solubility of said anti-microbial metals or metal ions.
45. (Original) The powder coating composition of claim 44 wherein the anti-microbial metal or metal ion is silver.
46. (Original) The powder coating composition of claim 45 wherein the silver is in the form of a silver ion carried by a zeolite.

47. (Original) The powder coating composition of claim 45 wherein the component that inhibits the migration or decreases the solubility of said silver is an ionic halide that is not already associated with silver.

48. (Original) The powder coating composition of claim 47 wherein the concentration of the ionic halide in the powder coating composition is less than 300 parts per million.

49. (Original) The powder coating composition of claim 47 wherein the concentration of the ionic halide in the powder coating composition is less than 50 parts per million.

50. (Original) The powder coating composition of claim 47 wherein the concentration of the ionic halide in the powder coating composition is less than 10 parts per million.

51. (Original) The powder coating composition of claim 47 wherein said ionic halide is chloride.

52. (Original) The powder coating composition of claim 46 wherein said silver zeolite is about 3 percent to 12 percent by weight of the sum of the components of the powder coating composition.